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ABSTRACT OF THE DISCLOSURE

A photo-sensing device package and the method of packaging such device is provided. The package includes an assembly portion having a substrate formed of a material substantially transparent to light within a predetermined range of wavelengths; a sensing portion including at least one photo-sensing die photo-electronically transducing light within the predetermined range of wavelengths; and, a plurality of first solder joints joining the sensing and assembly portions. The assembly portion is formed with at least a first metal layer disposed on the substrate about a front surface region thereof; and, at least one passivation layer formed to extend over the first metal layer. The passivation layer is patterned to define a plurality of first and second access openings which respectively describe on the first metal layer a plurality of first and second solder bump pads, each of which is interconnected to at least one of the second solder bump pads. The sensing portion's photo-sensing die is positioned with its photo-sensing area opposing the front surface region of the assembly portion's substrate, and has formed thereon a plurality of solder bump pads electrically coupled to the photo-sensing area. Each of the first solder joints extends between one of the sensing portion's solder bump pads and one of the assembly portion's first solder bump pads.

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